AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior listings and versions of claims in the application. The listing of claims below shows revisions with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Listing of Claims

1. (Currently Amended) An illuminator system for a flat-panel display, comprising:

a ~~tapered~~ slab waveguide disposed behind the display, the waveguide linearly tapered along a first axis of the display and co-extensive with the display across the first axis and a second axis of the display, the waveguide comprising a thick end and an opposing thin end with an input linear wedge protruding directly from the thick end of the waveguide;

a plurality of light sources each arranged to inject light ~~at a different angle~~ into [[an]] the input linear wedge ~~edge~~ of the waveguide, wherein the ~~light~~ injected light ~~from each of the light sources~~ emerges ~~at different positions on~~ over a face of the waveguide ~~based on the injection angle corresponding to each light source, and~~

~~means for scanning the emerging light associated with a light source onto a portion of the display, wherein a position of the portion of the display corresponds to the position on the face of the waveguide at which the light emerges,~~

~~wherein the waveguide comprises an extended section for mixing light of different colors from a light source before reaching the display, the extended section behind the display and comprising one or more prisms~~.

2. (Currently Amended) An illuminator system according to claim 1, in which each light source comprises a linear array of light sources configured to illuminate the input linear wedge of the waveguide ~~one or more addressable rows of elements, and the scanning means includes a circuit for addressing the rows of elements~~.

3. (Currently Amended) An illuminator system according to claim [[2]] 1, further comprising a cylindrical mirror configured to collimate the ~~in which~~ injected light ~~from the one or more rows of elements is collimated~~ into the ~~edge~~ input linear wedge of the waveguide ~~by a cylindrical mirror~~.

4-5. (Canceled)

6. (Currently Amended) An illuminator system according to claim 1, further ~~including~~ comprising a prismatic film ~~for guiding~~ configured to guide the injected light emerging ~~from~~ over the face of the waveguide ~~towards a~~ normal to the face of the waveguide.

7. (Canceled)

8. (Currently Amended) A display according to claim 7, in which the ~~modulator~~ flat-panel display is a liquid-crystal display.

9. (Currently Amended) A display according to claim 2, ~~in which~~ wherein a scanning addressing circuit is synchronized with the row addressing circuit of the display, the scanning addressing circuit configured to scan the injected light into the input linear wedge resulting in corresponding areas of the display being illuminated in turn.

10. (Canceled)

11. (Currently Amended) An illuminator system according to claim 1, wherein the waveguide is optically linearly tapered ~~by including internal variations~~ via variation in refractive index.

12. (Currently Amended) A method for illuminating a flat-panel display, comprising:

[[a)]] injecting light from a light source of a plurality of light sources ~~at an injection angle~~ into an input linear wedge ~~edge~~ of a ~~tapered~~ slab waveguide disposed behind the display, the waveguide linearly tapered along a first axis of the display and co-extensive with the display across the first axis and a second axis of the display, the waveguide comprising a thick end and an opposing thin end with the input linear wedge protruding directly from the thick end of the wave guide ~~that is co-extensive with the display, wherein light of different colors from the light source is mixed in an extended section of the waveguide located behind the display and comprising one or more prisms~~, wherein the injected light emerges ~~from a position on~~ over a face of the waveguide based on the injection angle of the light source; and

[[b)]] scanning the injected light into the input linear wedge resulting in different areas of the display being illuminated in turn ~~emerging from the position on the face of~~

~~the waveguide onto a portion of the display, wherein a position of the portion of the display corresponds to the position on the face of the waveguide;~~

~~c) switching off the light source; and~~

~~d) sequentially repeating steps a) – c) for one or more other light sources of the plurality of light sources, wherein each of the plurality of light sources corresponds to a different injection angle, so that different portions of the display are illuminated in turn as each light source injects light into the edge of the waveguide~~.

13. (Currently Amended) A method according to claim 12, wherein each light source comprises a linear array of light sources configured to illuminate the input linear wedge of the waveguide ~~one or more addressable rows of elements~~.

14. (Currently Amended) A method according to claim [[13]] 12, wherein injected light from the plurality of light sources ~~one or more rows of elements~~ is collimated into the ~~edge~~ input wedge of the waveguide by a cylindrical mirror.

15-16. (Canceled)

17. (Currently Amended) A method according to claim 12, ~~wherein the scanning~~ further ~~comprises~~ comprising guiding the injected light emerging ~~from~~ over the face of the waveguide ~~towards a~~ normal to the face of the waveguide.

18-19. (Canceled)